

Appln. Serial No. 10/675,559
Reply to Office Action Mailed March 28, 2006

LISTING OF THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application:

- 1 1. (Previously Presented) An apparatus comprising:
2 a cable having an outer surface; and
3 a seal assembly, comprising:
4 a thermoplastic seal;
5 a preload member adapted to apply a force to and induce cold flow of the
6 thermoplastic seal to seal against the outer surface of the cable.
- 1 2. (Previously Presented) The apparatus of claim 1, wherein the seal assembly further
2 comprises a ferrule abutting an end of the thermoplastic seal.
- 1 3. (Previously Presented) The apparatus of claim 2, wherein the ferrule is formed of a metal
2 material.
- 1 4. (Withdrawn) The apparatus of claim 1, wherein the thermoplastic seal has a slot formed
2 in an end thereof.
- 1 5. (Withdrawn) The apparatus of claim 4, wherein the seal assembly further comprises a
2 ferrule having a protruding, tapered end abutting the end of the thermoplastic seal.
- 1 6. (Previously Presented) The apparatus of claim 1, wherein the preload member is a
2 threaded mandrel.
- 1 7. (Withdrawn) The apparatus of claim 1, wherein the seal assembly further comprises a
2 spring adapted to maintain a force on the thermoplastic seal.
- 1 8. (Previously Presented) The apparatus of claim 1, wherein the thermoplastic seal has a
2 tensile modulus equal to or greater than 500,000 psi at room temperature.

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- 1 9. (Previously Presented) The apparatus of claim 1, wherein the thermoplastic seal has a
2 flexural modulus equal to or greater than 500,000 psi at room temperature.
- 1 10. (Previously Presented) The apparatus of claim 1, wherein the thermoplastic seal
2 comprises PEEK.
- 1 11. (Previously Presented) The apparatus of claim 1, wherein the thermoplastic seal
2 comprises PEK.
- 1 12. (Previously Presented) The apparatus of claim 1, wherein the thermoplastic seal
2 comprises PPS.
- 1 13. (Previously Presented) The apparatus of claim 1, wherein the thermoplastic seal
2 comprises PEKEKK.
- 1 14. (Previously Presented) The apparatus of claim 1, wherein the thermoplastic seal
2 comprises PET.
- 1 15. (Previously Presented) A method for sealing, comprising:
2 providing a control line having an outer surface, the control line comprising at least one
3 of a hydraulic line, fiber optic line, and electrical line;
4 providing a seal having a component formed of a thermoplastic;
5 inducing cold flow deformation of the component to create a fluidic seal against the outer
6 surface of the control line.
- 1 16. (Original) The method of claim 15, further comprising applying a preload to the seal to
2 induce the deformation.
- 1 17. (Cancelled)
- 1 18. (Withdrawn) The method of claim 15, wherein the deformation is caused by crimping.

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- 1 19. (Withdrawn) The method of claim 15, wherein the deformation is caused by clamping.
- 1 20. (Previously Presented) The method of claim 16, further comprising maintaining the
2 preload on the seal.
- 1 21. (Previously Presented) The method of claim 15, wherein the thermoplastic component
2 has a tensile modulus equal to or greater than 500,000 psi at room temperature.
- 1 22. (Previously Presented) The method of claim 15, wherein the thermoplastic component
2 has a flexural modulus equal to or greater than 500,000 psi at room temperature.
- 1 23. (Previously Presented) The method of claim 15, wherein the thermoplastic component
2 comprises PEEK.
- 1 24. (Previously Presented) The method of claim 15, wherein the thermoplastic component
2 comprises PEK.
- 1 25. (Previously Presented) The method of claim 15, wherein the thermoplastic component
2 comprises PPS.
- 1 26. (Previously Presented) The method of claim 15, wherein the thermoplastic component
2 comprises PEKEKK.
- 1 27. (Previously Presented) The method of claim 15, wherein the thermoplastic component
2 comprises PET.

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- 1 28. (Previously Presented) An apparatus comprising:
2 a control line having an outer surface, the control line comprising at least one of a fiber
3 optic line and electrical line; and
4 a seal, comprising:
5 a ferrule; and
6 an adjacent seal member deformed by cold flow about at least a portion of the
7 ferrule to seal against the outer surface of the control line.
- 1 29. (Previously Presented) The apparatus of claim 28, wherein the seal comprises a
2 thermoplastic component.
- 1 30. (Previously Presented) The apparatus of claim 29, wherein the thermoplastic component
2 has a tensile modulus equal to or greater than 500,000 psi at room temperature.
- 1 31. (Previously Presented) The apparatus of claim 29, wherein the thermoplastic component
2 has a flexural modulus equal to or greater than 500,000 psi at room temperature.
- 1 32. (Previously Presented) The apparatus of claim 29, wherein the thermoplastic component
2 comprises PEEK.
- 1 33. (Previously Presented) The apparatus of claim 29, wherein the thermoplastic component
2 comprises PEK.
- 1 34. (Previously Presented) The apparatus of claim 29, wherein the thermoplastic component
2 comprises PPS.
- 1 35. (Previously Presented) The apparatus of claim 29, wherein the thermoplastic component
2 comprises PEKEKK.
- 1 36. (Previously Presented) The apparatus of claim 29, wherein the thermoplastic component
2 comprises PET.

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1 37. (Previously Presented) The apparatus of claim 28, further comprising a preload member.

1 38. (Previously Presented) An apparatus comprising:

2 a cable; and

3 a seal assembly, comprising:

4 a housing;

5 a deformed thermoplastic seal member that provides a fluidic seal against the

6 housing and the cable.

1 39. (Cancelled)

1 40. (Previously Presented) The apparatus of claim 38, wherein the seal member has a tensile
2 modulus equal to or greater than 500,000 psi at room temperature.

1 41. (Previously Presented) The apparatus of claim 38, wherein the seal member has a
2 flexural modulus equal to or greater than 500,000 psi at room temperature.

1 42. (Previously Presented) The apparatus of claim 38, wherein the seal member comprises a
2 PEEK material.

1 43. (Previously Presented) The apparatus of claim 38, wherein the seal member comprises a
2 PEK material.

1 44. (Previously Presented) The apparatus of claim 38, wherein the seal member comprises a
2 PPS material.

1 45. (Previously Presented) The apparatus of claim 38, wherein the seal member comprises a
2 PEKEKK material.

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- 1 46. (Previously Presented) The apparatus of claim 38, wherein the seal member comprises a
- 2 PET material.